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RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/326,402B

DATE: 03/10/2003 *fb*

TIME: 13:55:01

Input Set : A:\GEN-T112XC1.ST25.txt

Output Set: N:\CRF4\03102003\I326402B.raw

```

3 <110> APPLICANT: Blumenfeld, Marta
4      Bougueleret, Lydie
5      Chumakov, Ilya
7 <120> TITLE OF INVENTION: Polymorphic Markers of Prostate Carcinoma Tumor Antigen-1
(PCTA-1)
9 <130> FILE REFERENCE: GEN-T112XC1
11 <140> CURRENT APPLICATION NUMBER: 09/326,402B
12 <141> CURRENT FILING DATE: 1999-06-04
14 <150> PRIOR APPLICATION NUMBER: 60/088,187
15 <151> PRIOR FILING DATE: 1998-06-05
17 <150> PRIOR APPLICATION NUMBER: 60/102,324
18 <151> PRIOR FILING DATE: 1998-09-28
20 <160> NUMBER OF SEQ ID NOS: 22
22 <170> SOFTWARE: PatentIn version 3.1
24 <210> SEQ ID NO: 1
25 <211> LENGTH: 106746
26 <212> TYPE: DNA
27 <213> ORGANISM: Homo sapiens
29 <220> FEATURE:
30 <221> NAME/KEY: misc_feature
31 <222> LOCATION: 1..68647
32 <223> OTHER INFORMATION: 5'regulation region
34 <221> NAME/KEY: misc_feature
35 <222> LOCATION: 66647..68647
36 <223> OTHER INFORMATION: promoter
W--> 38 <221> misc_feature
39 <222> LOCATION: 97156..106746
40 <223> OTHER INFORMATION: 3'regulation region
W--> 42 <221> exon
43 <222> LOCATION: 68648..68741
44 <223> OTHER INFORMATION: exon0
W--> 46 <221> exon
47 <222> LOCATION: 70647..70794
48 <223> OTHER INFORMATION: exon1
W--> 50 <221> exon
51 <222> LOCATION: 82208..82296
52 <223> OTHER INFORMATION: exon2
W--> 54 <221> exon
55 <222> LOCATION: 83613..83823
56 <223> OTHER INFORMATION: exon3
W--> 58 <221> exon
59 <222> LOCATION: 85298..85417
60 <223> OTHER INFORMATION: exon4
W--> 62 <221> exon

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```

63 <222> LOCATION: 86389..86445
64 <223> OTHER INFORMATION: exon5
W--> 66 <221> exon
67 <222> LOCATION: 87496..87522
68 <223> OTHER INFORMATION: exon6
W--> 70 <221> exon
71 <222> LOCATION: 87650..87775
72 <223> OTHER INFORMATION: exon6bis
W--> 74 <221> exon
75 <222> LOCATION: 88295..88383
76 <223> OTHER INFORMATION: exon7
W--> 78 <221> exon
79 <222> LOCATION: 89484..89649
80 <223> OTHER INFORMATION: exon8
W--> 82 <221> exon
83 <222> LOCATION: 92749..97155
84 <223> OTHER INFORMATION: exon9
W--> 86 <221> exon
87 <222> LOCATION: 92749..92883
88 <223> OTHER INFORMATION: exon9bis
W--> 90 <221> exon
91 <222> LOCATION: 95821..97155
92 <223> OTHER INFORMATION: exon9ter
W--> 94 <221> misc_feature
95 <222> LOCATION: 70647..70794
96 <223> OTHER INFORMATION: homology with genset EST : A241850
W--> 98 <221> misc_feature
99 <222> LOCATION: 68648..68741
100 <223> OTHER INFORMATION: homology with genset EST : A241850
W--> 102 <221> misc_feature
103 <222> LOCATION: 82208..82229
104 <223> OTHER INFORMATION: homology with genset EST : A241850
W--> 106 <221> allele
107 <222> LOCATION: 278
108 <223> OTHER INFORMATION: 99-1601-278 : polymorphic base A or C
W--> 110 <221> allele
111 <222> LOCATION: 402
112 <223> OTHER INFORMATION: 99-1601-402 : polymorphic base A or T
W--> 114 <221> allele
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116 <223> OTHER INFORMATION: 99-1601-472 : polymorphic base A or T
W--> 118 <221> allele
119 <222> LOCATION: 2955
120 <223> OTHER INFORMATION: 99-13801-100 : polymorphic base T or C
W--> 122 <221> allele
123 <222> LOCATION: 12167
124 <223> OTHER INFORMATION: 99-13806-166 : polymorphic base G or A
W--> 126 <221> allele
127 <222> LOCATION: 12536

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128 <223> OTHER INFORMATION: 99-13799-376 : polymorphic base T or G
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132 <223> OTHER INFORMATION: 99-13798-297 : polymorphic base T or C
W--> 134 <221> allele
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136 <223> OTHER INFORMATION: 99-13798-284 : polymorphic base T or C
W--> 138 <221> allele
139 <222> LOCATION: 22079
140 <223> OTHER INFORMATION: 99-1602-200 : polymorphic base G or C
W--> 142 <221> allele
143 <222> LOCATION: 28964
144 <223> OTHER INFORMATION: 99-13794-186 : polymorphic base T or C
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147 <222> LOCATION: 29003
148 <223> OTHER INFORMATION: 99-13794-147 : polymorphic base C or G
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152 <223> OTHER INFORMATION: 99-13812-384 : polymorphic base T or C
W--> 154 <221> allele
155 <222> LOCATION: 31766
156 <223> OTHER INFORMATION: 99-13805-313 : polymorphic base T or C
W--> 158 <221> allele
159 <222> LOCATION: 34791
160 <223> OTHER INFORMATION: 99-1587-281 : polymorphic base A or G
W--> 162 <221> allele
163 <222> LOCATION: 45751
164 <223> OTHER INFORMATION: 99-1582-430 : polymorphic base C or T
W--> 166 <221> allele
167 <222> LOCATION: 49847
168 <223> OTHER INFORMATION: 99-1585-465 : polymorphic base T or C
W--> 170 <221> allele
171 <222> LOCATION: 49855
172 <223> OTHER INFORMATION: 99-1585-457 : polymorphic base T or C
W--> 174 <221> allele
175 <222> LOCATION: 49886
176 <223> OTHER INFORMATION: 99-1585-426 : polymorphic base G or A
W--> 178 <221> allele
179 <222> LOCATION: 49900
180 <223> OTHER INFORMATION: 99-1585-412 : polymorphic base G or A
W--> 182 <221> allele
183 <222> LOCATION: 49906
184 <223> OTHER INFORMATION: 99-1585-406 : polymorphic base C or A
W--> 186 <221> allele
187 <222> LOCATION: 49921
188 <223> OTHER INFORMATION: 99-1585-391 : polymorphic base C or A
W--> 190 <221> allele
191 <222> LOCATION: 49939
192 <223> OTHER INFORMATION: 99-1585-373 : polymorphic base G or A

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Input Set : A:\GEN-T112XC1.ST25.txt

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W--> 194 <221> allele
195 <222> LOCATION: 50256
196 <223> OTHER INFORMATION: 99-1585-55 : polymorphic base C or A
W--> 198 <221> allele
199 <222> LOCATION: 54955
200 <223> OTHER INFORMATION: 99-1607-373 : polymorphic base T or C
W--> 202 <221> allele
203 <222> LOCATION: 64239
204 <223> OTHER INFORMATION: 99-1577-105 : polymorphic base A or G
W--> 206 <221> allele
207 <222> LOCATION: 65436
208 <223> OTHER INFORMATION: 99-1591-235 : polymorphic base A or G
W--> 210 <221> allele
211 <222> LOCATION: 65496
212 <223> OTHER INFORMATION: 99-1591-295 : polymorphic base G or T
W--> 214 <221> allele
215 <222> LOCATION: 66967
216 <223> OTHER INFORMATION: 99-1572-315 : polymorphic base C or T
W--> 218 <221> allele
219 <222> LOCATION: 66987
220 <223> OTHER INFORMATION: 99-1572-335 : polymorphic base A or G
W--> 222 <221> allele
223 <222> LOCATION: 67092
224 <223> OTHER INFORMATION: 99-1572-440 : polymorphic base C or T
W--> 226 <221> allele
227 <222> LOCATION: 67129
228 <223> OTHER INFORMATION: 99-1572-477 : polymorphic base A or T
W--> 230 <221> allele
231 <222> LOCATION: 67229
232 <223> OTHER INFORMATION: 99-1572-578 : polymorphic base C or T
W--> 234 <221> allele
235 <222> LOCATION: 67433
236 <223> OTHER INFORMATION: 5-264-188 : polymorphic base A or G
W--> 238 <221> allele
239 <222> LOCATION: 67723
240 <223> OTHER INFORMATION: 5-169-97 : polymorphic base G or C
W--> 242 <221> allele
243 <222> LOCATION: 67834
244 <223> OTHER INFORMATION: 5-169-208 : polymorphic base A or G
W--> 246 <221> allele
247 <222> LOCATION: 67955
248 <223> OTHER INFORMATION: 5-169-331 : polymorphic base C or T
W--> 250 <221> allele
251 <222> LOCATION: 68213
252 <223> OTHER INFORMATION: 5-170-238 : polymorphic base A or G
W--> 254 <221> allele
255 <222> LOCATION: 68263
256 <223> OTHER INFORMATION: 5-170-288 : polymorphic base A or C
W--> 258 <221> allele

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Input Set : A:\GEN-T112XC1.ST25.txt

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259 <222> LOCATION: 68375
260 <223> OTHER INFORMATION: 5-170-400 : polymorphic base G or C
W--> 262 <221> allele
263 <222> LOCATION: 68477
264 <223> OTHER INFORMATION: 5-171-156 : polymorphic base G or T
W--> 266 <221> allele
267 <222> LOCATION: 68525
268 <223> OTHER INFORMATION: 5-171-204 : polymorphic base C or T
W--> 270 <221> allele
271 <222> LOCATION: 68594
272 <223> OTHER INFORMATION: 5-171-273 : polymorphic base A or G
W--> 274 <221> allele
275 <222> LOCATION: 68610
276 <223> OTHER INFORMATION: 5-171-289 : polymorphic base C or T
W--> 278 <221> allele
279 <222> LOCATION: 70566
280 <223> OTHER INFORMATION: 5-1-60 : polymorphic base C or T
W--> 282 <221> allele
283 <222> LOCATION: 70728
284 <223> OTHER INFORMATION: 5-1-222 : polymorphic base A or G
W--> 286 <221> allele
287 <222> LOCATION: 80038
288 <223> OTHER INFORMATION: 99-1578-99 : polymorphic base G or T
W--> 290 <221> allele
291 <222> LOCATION: 80118
292 <223> OTHER INFORMATION: 99-1578-179 : polymorphic base A or T
W--> 294 <221> allele
295 <222> LOCATION: 80170
296 <223> OTHER INFORMATION: 99-1578-231 : insertion AC
W--> 298 <221> allele
299 <222> LOCATION: 80183
300 <223> OTHER INFORMATION: 99-1578-245 : deletion AT
W--> 302 <221> allele
303 <222> LOCATION: 80435
304 <223> OTHER INFORMATION: 99-1578-496 : polymorphic base C or T
W--> 306 <221> allele
307 <222> LOCATION: 82090
308 <223> OTHER INFORMATION: 5-2-30 : insertion CAG
W--> 310 <221> allele
311 <222> LOCATION: 82165
312 <223> OTHER INFORMATION: 5-2-109 : polymorphic base G or T
W--> 314 <221> allele
315 <222> LOCATION: 82169
316 <223> OTHER INFORMATION: 5-2-113 : deletion GTTT
W--> 318 <221> allele
319 <222> LOCATION: 82218
320 <223> OTHER INFORMATION: 5-2-162 : polymorphic base A or T
W--> 322 <221> allele
323 <222> LOCATION: 82234

RAW SEQUENCE LISTING ERROR SUMMARY
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Input Set : A:\GEN-T112XC1.ST25.txt
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Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:1; N Pos. 8187,14867,14970,29204,29487,34266
Seq#:12; N Pos. 8187,14867,14970,29204,29487,34266
Seq#:22; Xaa Pos. 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22
Seq#:22; Xaa Pos. 23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41
Seq#:22; Xaa Pos. 42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60
Seq#:22; Xaa Pos. 61,62,63,64,65,66,67,68,69,70,71,72,73,74,75,76,77,78,79
Seq#:22; Xaa Pos. 80,81,82,83,84,85,86,87,88,89,90,91,92,93,94,95,96,97,98
Seq#:22; Xaa Pos. 99,100,101,102,103,104,105,106,107,108,109,110,111,112
Seq#:22; Xaa Pos. 113,115,116,118,119,120,121,124,127,130,131,132,133,135
Seq#:22; Xaa Pos. 137,139,141,142,144,147,151,152,154,155,156,157,158,160
Seq#:22; Xaa Pos. 162,171,172,173,174,175,176,177,178,184,185,186,188,191
Seq#:22; Xaa Pos. 195,196,197,198,201,202,204,205,208,209,210,211,213,214
Seq#:22; Xaa Pos. 216,220,224,225,226,227,228,230,234,237,238,240,241,242
Seq#:22; Xaa Pos. 243,245,251,254,256,257,258,259,260,261,262,263,264,265
Seq#:22; Xaa Pos. 266,267,268,269,270,271,272,273,274,275,276,277,278,279
Seq#:22; Xaa Pos. 280,281,282,283,284,285,286,287,288,289,290,291,292,293
Seq#:22; Xaa Pos. 294,295,296,297,298,299,300,301,302,303,304,305,306,307
Seq#:22; Xaa Pos. 308,309,310,311,312,313,314,315,316,317,318,319,320,321
Seq#:22; Xaa Pos. 322,323,324,325,326,327,328,329,330,331,332,333,335,336
Seq#:22; Xaa Pos. 337,338,339,340,341,342,343,344,345,346,347,348,349,350
Seq#:22; Xaa Pos. 351,352,354,356,357,358,359,360,361,363,364,365,366,367
Seq#:22; Xaa Pos. 368,369,370,371,372,373,376,378,380,382,383,384,385,386
Seq#:22; Xaa Pos. 387,391,392,393,394,395,396,399,402,403,404,405,406,407
Seq#:22; Xaa Pos. 408,411,412,414,415,417,418,419,421,423,424,425,426,427
Seq#:22; Xaa Pos. 430,431,432,434,436,437,438,439,440,443,444,445,446,447
Seq#:22; Xaa Pos. 448,449,450,451,453,454,455,458,459,461,462,464,465,466

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L:38 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:1
L:42 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:1
L:46 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:1
L:50 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:1
L:54 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:1
L:58 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:1
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L:70 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:1
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L:94 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:1
L:98 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:1
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L:126 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:1
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L:142 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:1
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L:150 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:1
L:154 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:1
L:158 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:1
L:162 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:1
L:166 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:1
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L:178 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:1
L:182 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:1
L:186 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:1
L:190 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:1
L:194 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:1
L:198 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:1
L:202 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:1
L:206 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:1
L:210 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:1
L:214 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:1
L:218 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:1
L:222 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:1
L:226 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:1

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L:230 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:1
L:234 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:1
L:3011 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1 after pos.:8160
M:341 Repeated in SeqNo=1
L:6333 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12 after pos.:8160
M:341 Repeated in SeqNo=12
L:8703 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:22 after pos.:0
M:341 Repeated in SeqNo=22